

B 3952 US

BEST AVAILABLE COPY

BEST AVAILABLE COPY

Claims

1. A tool for injection molding of toothbrush bodies of at least two different plastics components injection-molded in succession, said tool comprising two mold parts which can be moved relative to each other and together constitute at least two groups of parallel mold cavities, and further comprising a rotatable carrier arm mounted for rotation about an axis, with

- one of said mold parts comprising a recess for each group of mold cavities, a mold insert being insertable into said recess,

- partial cavities being formed in said mold inserts, which partial cavities each correspond to a head portion of said toothbrush bodies,

- a first one of said plastics components being injected into a first one of said groups of mold cavities, and

- a second one of said plastics components being injected into a second one of said groups of mold cavities;

wherein

a) said mold cavities of said first and second groups are arranged on opposite sides of said rotatable carrier arm, said mold inserts being attached to said carrier arm;

b) said mold cavities are arranged in each group parallel to each other and so as to have an identical orientation;

c) said mold cavities of said first group are arranged so as to lie opposite to said mold cavities of said second group; and

d) said mold cavities of said first group are arranged, with respect to the axis of said carrier arm so as to be point-symmetric to said mold cavities of said second group.

2. The tool according to Claim 1, wherein each group is constituted by a pair of subgroups.

3. The tool according to Claim 2, wherein, in each pair of subgroups, said mold cavities of one subgroup are arranged so as to be in alignment with said mold cavities of an other subgroup.

5

100  
101  
102  
103  
104  
105  
106  
107  
108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118  
119  
120  
121  
122  
123  
124  
125  
126  
127  
128  
129  
130  
131  
132  
133  
134  
135  
136  
137  
138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168  
169  
170  
171  
172  
173  
174  
175  
176  
177  
178  
179  
180  
181  
182  
183  
184  
185  
186  
187  
188  
189  
190  
191  
192  
193  
194  
195  
196  
197  
198  
199  
200